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## - 17 -ABSTRACT

The invention relates to a device for the digital treatment of audio signals. especially for treating patients with audiophonatory disorders. Said device comprises an analog audiofrequency signal input (E), an analog-digital encoder (2), an envelope detector (6), a digital limiter (10), a multiplier (12), a synthesiser (14), and a digitalanalog converter (16). The invention is characterised in that: the analog-digital encoder (2) is arranged in such a way as to reflect the input analog audiofrequency signal by a first sequence of digital values; the envelope detector (6) is arranged in such a way as to establish, from the first sequence of digital values, a second sequence of digital values reflecting the envelope of the input audiofrequency signal; the digital limiter (10) is arranged in such a way as to establish a third sequence of defined digital values, from the second sequence of digital values; the multiplier (12) is arranged in such a way as to establish a sequence of modulated emission frequency values according to the values of the third sequence of digital values; the synthesiser (14) is arranged in such a way as to elaborate a digital audio signal from the sequence of emission frequency values; and the digital-analog converter (16) is arranged in such a way as to produce an output analog signal from the digital audio signal.